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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,601	03/19/2004	Spencer P. Kuo	Poly-61	9556
26479	7590	11/22/2005	EXAMINER	
STRAUB & POKOTYLO 620 TINTON AVENUE BLDG. B, 2ND FLOOR TINTON FALLS, NJ 07724			VAN, QUANG T	
			ART UNIT	PAPER NUMBER
			3742	

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/804,601

Applicant(s)

KUO, SPENCER P.

Examiner

Quang T. Van

Art Unit

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/03/2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 11, 12 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 16-20, 24-26 and 29 is/are rejected.
- 7) ☒ Claim(s) 6, 8-10, 13-15, 21-23, 28 and 30-34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/19/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's election without traverse of Species I (Figures 1-3, claims 1-10, 13-26 and 28-34) in the reply filed on 10/03/2005 is acknowledged. Non-elected claims 11-12 and 27 are withdrawn from consideration.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 24, 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Barmatz et al (US 5,847,355). Barmatz discloses a plasma-assisted microwave processing of materials comprising a cavity (102) adapted to support at least one of a TE or TM mode (col.9, lines59) at a microwave frequency; and a torch module (col. 4, lines 59-61), coupled with the cavity (102), for generating seed plasma within the cavity (102).

4. Claims 1-3, 7, 24, 29 are rejected under 35 U.S.C. 102(a) as being anticipated by Bessho et al (US 6,614,000). Bessho discloses an organic halogen compound decomposition device comprising a cavity (15) adapted to support at least one of a TE or TM mode (col. 8, lines 4-16) at a microwave frequency; and a torch module (col. 8, lines 45), coupled with the cavity (15), for generating seed plasma within the cavity (15).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4-5, 16-18, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bessho et al (US 6,614,000) in view of Blum et al (US 6,388,225). Bessho discloses substantially all features of the claimed invention except the torch module being an arc torch module, and wherein the seed plasma generated by the arc torch module discharge triggers microwave discharge in the cavity. Blum discloses, figure 3, a torch module being an arc torch module, and wherein the seed plasma generated by the arc torch module discharge triggers microwave discharge in the cavity (col. 5, lines 65-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize in Bessho a torch module being an arc torch module, and wherein the seed plasma generated by the arc torch module discharge triggers microwave discharge in the cavity as taught by Blum in order to provide additional plasma to the chamber. With regard to claim 18, the hybrid arc/microwave plasma discharge forms a column reaching a height of about 6 cm and a diameter of about 2 cm. It would have been obvious to one having ordinary skill in the art to provide and control powers and flow gas to make hybrid arc/microwave plasma discharge forms a column reaching a height of about 6 cm and a diameter of about 2 cm in order to provide heat suitable to a required wokpiece.

7. Claims 19-20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bessho et al (US 6,614,000) in view of Kuo et al (US 6,329,628) cited by applicant. Bessho discloses substantially all features of the claimed invention except a common transformer providing power supply to a first and second power supply modules. Kuo discloses a common transformer (310) providing power supply to a first (100) and second (200) power supply modules (col. 6, lines 25-29). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize in Bessho a common transformer providing power supply to a first and second power supply modules as taught by Kuo in order to provide power to plurality of modules.
8. Claims 6, 8-10,13-15, 21-23, 28 and 30-34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang T. Van whose telephone number is 571-272-4789. The examiner can normally be reached on 8:00Am 7:00Pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

QV

QV

November 16, 2005



Quang T Van
Primary Examiner
Art Unit 3742